6CY7

# 6CY7

## DUAL TRIODE

### With High-Mu Unit and Low-Mu Unit

9-PIN MINIATURE TYPE

### GENERAL DATA

**Electrical:**

Heater, for Unipotential Cathodes:

| | | |
|---|---|---|
| Voltage (AC or DC) | 6.3 ± 10% | volts |
| Current | 0.75 | amp |

Direct Interelectrode Capacitances (Approx.):°

| | *Unit No.1* | *Unit No.2* | |
|---|---|---|---|
| Grid to plate | 1.8 | 4.4 | μμf |
| Grid to cathode and heater | 1.5 | 5 | μμf |
| Plate to cathode and heater | 0.3 | 1 | μμf |

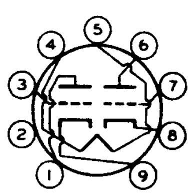
**Characteristics, Class $A_1$ Amplifier:**

| | *Unit No.1* | *Unit No.2* | | |
|---|---|---|---|---|
| Plate Supply Voltage | 250 | 60 | 150 | volts |
| Grid Voltage | -3 | 0 | - | volts |
| Cathode Resistor | - | - | 620 | ohms |
| Amplification Factor | 68 | - | 5 | |
| Plate Resistance (Approx.) | 52000 | - | 920 | ohms |
| Transconductance | 1300 | - | 5400 | μmhos |
| Plate Current | 1.2 | 80* | 30 | ma |
| Plate Current for grid volts = -30 | - | - | 3.5 | ma |
| Grid Voltage (Approx.) for plate μa = 10 | -5.5 | - | - | volts |
| Grid Voltage (Approx.) for plate μa = 200 | - | - | -40 | volts |

**Mechanical:**

Operating Position . . . . . . . . . . . . . . . . . . . . . . . Any
Maximum Overall Length . . . . . . . . . . . . . . . . . . 2-5/8"
Maximum Seated Length . . . . . . . . . . . . . . . . . . 2-3/8"
Length, Base Seat to Bulb Top (Excluding tip) . . 2" ± 3/32"
Diameter . . . . . . . . . . . . . . . . . . . . 0.750" to 0.875"
Dimensional Outline . . . . . . . . . . . . *See General Section*
Bulb . . . . . . . . . . . . . . . . . . . . . . . . . . . . T6-1/2
Base . . . . . . . . . Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW . . . . . . . . . . . 9LG

Pin 1 - Plate of Unit No.2
Pin 2 - Internal Connection— Do Not Use
Pin 3 - Grid of Unit No.2
Pin 4 - Heater
Pin 5 - Heater




Pin 6 - Plate of Unit No.1
Pin 7 - Grid of Unit No.1
Pin 8 - Cathode of Unit No.1
Pin 9 - Cathode of Unit No.2



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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## DUAL TRIODE
### With High-Mu Unit and Low-Mu Unit

**VERTICAL-DEFLECTION OSCILLATOR**

*Values are for Unit No.1*

**Maximum Ratings,** *Design-Maximum Values:*

*For operation in a 525-line, 30-frame system*□

| | | | |
|---|---|---|---|
| DC PLATE VOLTAGE | 350 | max. | volts |
| PEAK NEGATIVE-PULSE GRID VOLTAGE | 400 | max. | volts |
| PLATE DISSIPATION | 1 | max. | watt |
| PEAK HEATER-CATHODE VOLTAGE: | | | |
| Heater negative with respect to cathode | 200 | max. | volts |
| Heater positive with respect to cathode | 200▲ | max. | volts |

**Maximum Circuit Values:**

| | | | |
|---|---|---|---|
| Grid-Circuit Resistance | 2.2 | max. | megohms |

**VERTICAL-DEFLECTION AMPLIFIER**

*Values are for Unit No.2*

**Maximum Ratings,** *Design-Maximum Values:*

*For operation in a 525-line, 30-frame system*□

| | | | |
|---|---|---|---|
| DC PLATE VOLTAGE | 350 | max. | volts |
| PEAK POSITIVE-PULSE PLATE VOLTAGE# | 1800 | max. | volts |
| PEAK NEGATIVE-PULSE GRID VOLTAGE | 250 | max. | volts |
| CATHODE CURRENT: | | | |
| Peak | 120 | max. | ma |
| Average | 35 | max. | ma |
| PLATE DISSIPATION | 5.5 | max. | watts |
| PEAK HEATER-CATHODE VOLTAGE: | | | |
| Heater negative with respect to cathode | 200 | max. | volts |
| Heater positive with respect to cathode | 200▲ | max. | volts |

**Maximum Circuit Values:**

| | | | |
|---|---|---|---|
| Grid-Circuit Resistance: | | | |
| For cathode-bias operation | 2.2 | max. | megohms |

○ Without external shield.

* This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

▲ The dc component must not exceed 100 volts.

# This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.